

## *The Economy: Developments and Policies*

In 2001 Israel's economy suffered the worst recession it has known in a very long time. GDP fell by 0.6 percent, per capita GDP dropped by 2.8 percent, business-sector product went down by 1.9 percent, and employment in that sector also fell. The unemployment rate rose, and reached 10.2 percent at the end of the year. Exports, which had led economic growth for several years, slumped, and the balance-of-payments deficit grew to 1.5 percent of GDP. The Consumer Price Index (CPI) rose by 1.4 percent during the year, below the lower limit of the inflation target range of 2.5–3.5 percent for the year, but within the range defined as price stability. The budget deficit surged to 4.6 percent of GDP,<sup>1</sup> far in excess of the target deficit of 1.75 percent. Signs of the recession were evident in all parts of the business sector, with the high-tech, construction, and tourism industries the worst hit. Start-ups, which had made a great contribution to the rise in business-sector product in 2000, were directly responsible for part of its decline in 2001. The real wage per employee post increased by an average of 2.5 percent, exceeding the minimal rise in productivity, with similar rises in the business sector and in the public sector—following a significant increase in 2000. The effects of the recession on wages started appearing as the year progressed, and in the second half of the year the average real wage went down. These developments continued to erode the profitability of the business sector, as could be seen from the decline in the net return on capital, the rise in unit labor cost, and persistent real appreciation of the NIS, although the latter was more moderate than in previous years. In contrast to the relatively low level of economic activity in the business sector, there was marked government involvement in economic activity: public consumption rose considerably, and employment in the public sector expanded very significantly. Private consumption also continued to increase faster than did GDP, and its persistent growth prevented the recession from being even more severe, at least in the short term.

<sup>1</sup> Of this, about half a percent of GDP was due to the deferment of part of the US economic aid from the end of 2001 to the beginning of 2002.

The main causes of the slowdown in economic activity which started in the last quarter of 2000 were shocks in Israel and worldwide: the security situation in Israel; the worldwide recession, particularly that in the US, which resulted from the worldwide crisis in high-tech industries; and the crisis in capital markets throughout the world. These shocks, felt mainly through the reduction in demand for business-sector product, became more intense during the year and deepened the recession in Israel. The effect of the terrorist attacks in Israel was expressed mainly in the severe cutbacks in incoming tourism, in exports to the Palestinian Autonomy, and in activity in construction and agriculture. The direct effect of the *intifada* on business-sector product in 2001 is estimated at about 3 percent. The worldwide recession and particularly that in the US affected Israel's exports via its effect on world trade, which led to a reduction in the demand for Israel's export goods. The high-tech industries were affected most, suffering not only from the worldwide slowdown but also from the crisis in the capital markets. The direct effect of the high-tech shock on the growth of the business sector is estimated at 2.8 percent of its product.

On the fiscal side, macroeconomic policy in 2001 was marked by the break in the process of adopting the norms accepted by the world's advanced economies, and there was even some movement away from them, while on the monetary side price stability was preserved, with some easing of monetary restraint.

The budget deficit rose to 4.6 percent of GDP in 2001, compared to the target of 1.75 percent. The deviation from the target was caused mainly by revenues—both tax and non-tax—falling short of the forecast, essentially because of the recession and because prices rose by less than the assumption underlying the budget. Government expenditure in nominal terms increased in line with the budget, but the rise in real terms exceeded the planned figure because of the lower than expected price increases. Thus the real increase in expenditure (deflated by the business sector-product deflator) of more than 5 percent, following a similar increase in 2000, combined with the standstill in GDP, raised the share of public expenditure in GDP to 54 percent. The composition of budget expenditure also deteriorated, with a larger share going to current expenditure, especially wages and transfer payments. The tax burden, which in 2000 had reached 41 percent, higher than the rate throughout the 1990s, remained at this level in 2001. Fiscal developments were manifested by the reversal of the downward trend of gross public debt, and the debt rose to 98.1 percent of GDP, up from 93 percent in 2000. The weakening of fiscal control and the persistent high tax burden are likely to undermine the credibility of economic policy and create expectations of tax hikes, which would impede the return of the economy to a path of sustainable growth and the realization of its growth potential.

Monetary policy in 2001 continued to focus on achieving the inflation target while maintaining stability, and was reflected by the continued gradual and almost constant lowering of the Bank of Israel's interest rate. The recession—in the form of the decline in GDP and an increase in the output gap—the severity

of which became clear in the last quarter of the year, had a stronger than anticipated effect in moderating price increases, and thus brought inflation to below the target. It is important to emphasize that the gradual and cautious cuts in the interest rate, in the light of the rapid increase in the budget deficit and against the background of the domestic and overseas shocks that affected the economy, afforded stability to the financial and foreign currency markets, a factor which could not be taken for granted in the situation prevailing in 2001.

An ex-post analysis of macroeconomic policy shows that a slightly faster rate of lowering the Bank of Israel's interest rate combined with fiscal discipline which would have restricted the deviation of the deficit from the target to half a percent of GDP would have reduced the extent of the deviation of both the deficit and inflation from their targets. Such a policy would not have contributed much to growth in 2001 because of the intensity of the external shocks; nevertheless, it may reasonably be assumed that it would have led to a more gradual and smoother move towards the policy mix which was eventually adopted for 2002—monetary expansion and a return to fiscal discipline, a mix which, if implemented, will support a return to economic growth.

As the recession worsened towards the end of the year, the government decided to revise the growth rate assumption underlying the budget, and to make deep cuts in the budget (relative to the original proposal), and it set a deficit target of 3 percent of GDP for 2002, and a downward deficit path for the deficit, to reach 1 percent of GDP in 2005. This was the backdrop to an agreement in December covering the adoption of several policy measures, including a 2 percentage-point reduction in the Bank of Israel interest rate, and a number of structural changes to the money markets which would increase the Bank's flexibility in operating the monetary instruments, advance the liberalization process in the foreign currency market towards its completion at the end of the year, and help (a little) to make the exchange-rate regime more flexible. It was assessed that these steps would enable price stability to be maintained at a lower rate of interest while supporting real depreciation which would help exports to recover faster when world demand picks up.

From the time of the announcement of the 'package' until the middle of March 2002 the NIS depreciated by about 10 percent against the dollar, and in January and February the CPI rose by a cumulative 1.9 percent. This took place against the background of the approval of the budget, which, according to updated assessments, is not consistent with the deficit target of 3 percent of GDP unless significant further cuts are made. The budget approved will also make it more difficult to attain the target for 2003. Changes in the composition of budgetary expenditure in 2002, particularly moves to increase taxes, do not support sustainable growth. Under these conditions it is doubtful whether price stability can be maintained at the interest rate which prevailed at the end of 2001, and interest will therefore be adjusted as required to ensure stability under the changing circumstances.

## 1. MAIN DEVELOPMENTS

In 2001 Israel's economy suffered its worst recession for a very long time. GDP fell by 0.6 percent, per capita GDP dropped by 2.8 percent, business-sector product went down by 1.9 percent, and employment in that sector also fell. The unemployment rate rose, and reached 10.2 percent by the end of the year. Exports, which had led economic growth for several years, slumped, and the balance-of-payments deficit grew. The Consumer Price Index (CPI) went up by 1.4 percent during the year, below the lower limit of the inflation target range of 2.5–3.5 percent for the year, but within the range defined as price stability. Signs of the recession were evident in all parts of the business sector, with high-tech industries, construction, and tourism the worst hit. Start-ups, which had made a great contribution to the rise in business-sector product in 2000, were directly responsible for part of its decline in 2001. In contrast to the relatively low level of economic activity in the business sector, there was marked government involvement in economic activity: public consumption rose considerably, and employment in the public sector expanded very significantly. Private consumption also continued to increase relatively quickly, and its persistent growth prevented the recession from being even more severe in the short term (Tables 1a, 1b and 2, and Figure 1).

GDP fell by 0.6 percent, per capita GDP by 2.8 percent, and business-sector product by 1.9 percent.

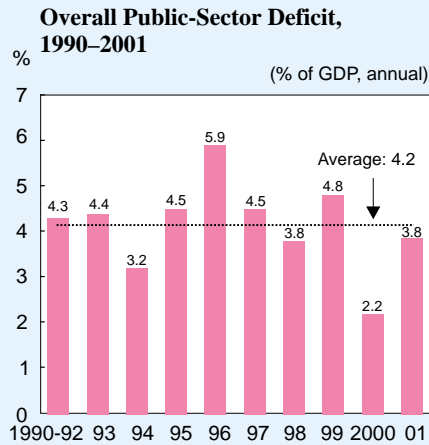
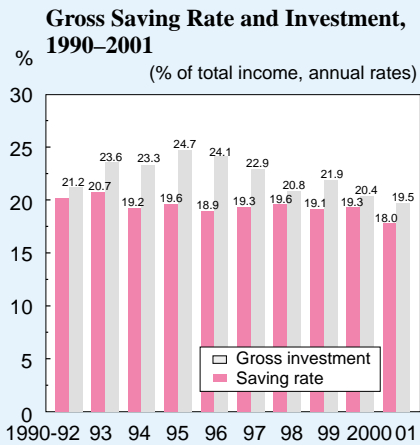
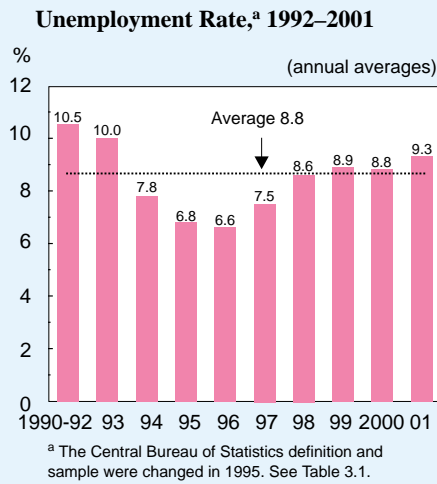
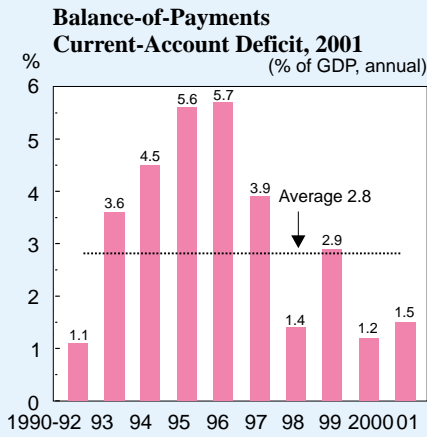
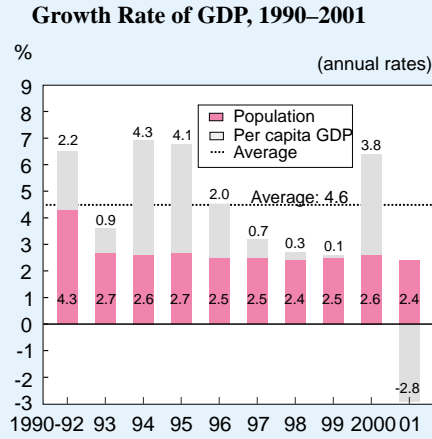
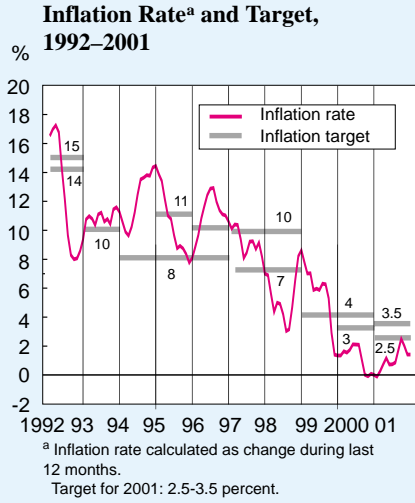
The direct effect of the *intifada* on business-sector product in 2001 is estimated at about 3 percent.

The direct effect of the high-tech shock on the growth of the business-sector is estimated at 2.8 percent of its product.

The main causes of the slowdown in economic activity which started in the last quarter of 2000 were shocks in Israel and worldwide: the security situation in Israel; the global recession, particularly that in the US, which resulted from the worldwide crisis in high-tech industries; and the crisis in capital markets throughout the world. These shocks, felt mainly through the reduction in demand for business-sector product, became more intense during the year and deepened the recession in Israel. The effect of the terrorist attacks in Israel was expressed mainly by the severe cutbacks in incoming tourism and in exports to the Palestinian Authority, but unskilled-labor-intensive industries (mainly construction and agriculture) also suffered. The main effect was felt on the demand side, but supply was also affected, albeit to a lesser extent, by the reduction in employment of Palestinian workers. The direct effect of the *intifada* in 2001 on the growth of the business sector is estimated at about 3 percent of business-sector product. The worldwide recession and particularly that in the US affected Israel's exports via its effect on world trade, which led to a reduction in the demand for Israel's export goods. The high-tech industries were affected most, suffering not only from the worldwide slowdown but also from the crisis in the capital markets. The direct effect of the high-tech shock on the growth of the business sector is estimated at 2.8 percent of its product.

Some measure of slowdown in the rate of economic growth was expected without reference to the factors outlined above, as the high rates of growth achieved from the fourth quarter of 1999 to the third quarter of 2000, which were based *inter alia* on the 'technology bubble,' cannot be maintained in the long run. If the two years 2000 and 2001 are viewed together—the first exceptional in its growth rate and the second exceptional in its recession—an average annual growth rate of about 3 percent is obtained for both GDP and business-sector product, similar to the rates from 1997 to

Figure 1: Key Economic Indicators



SOURCE: Based on Central Bureau of Statistics and Bank of Israel data.

**Table 1a**  
**Israel: Basic Economic Data,<sup>a</sup> 1986–2001**

	1986– 1989	1990– 1992	1993– 1996	1997– 1999	1999	2000	2001
Mean population ('000s)	4,407	4,911	5,473	5,974	6,121	6,283	6,437
Population growth rate (percent)	1.6	4.3	2.6	2.5	2.5	2.6	2.4
Israelis employed ('000s)	1,420	1,573	1,900	2,083	2,137	2,221	2,270
GDP (NIS billion, 2001 prices)	260	307	373	429	429	468	465
GDP growth rate (percent)	3.6	6.4	5.5	2.9	2.6	6.4	–0.6
Per capita GDP (\$'000s, current prices)	8.7	12.1	15.1	17.1	16.7	17.9	17.2
Unemployment rate (percent)	7.1	10.5	7.8	8.3	8.9	8.8	9.3
Inflation rate (during year, percent)	18.2	15.0	11.1	5.6	1.3	0.0	1.4
Current-account deficit (percent of GDP)	0.2	1.1	4.8	2.7	2.9	1.2	1.5
Foreign-exchange reserves (\$ billion)	5.2	6.2	8.6	22.3	23.2	23.8	24.1
Net foreign debt (percent of GDP)	47.0	28.5	24.2	12.2	9.9	6.4	3.9

<sup>a</sup> Annual averages.

SOURCE: Based on Central Bureau of Statistics data.

1999 and significantly below the potential growth rate. Thus, the period from 1996 to 2001 saw a constantly widening output gap (with the exception of a period of six quarters), with constant erosion of profitability as measured by a decline in the net return on capital. The long-term erosion of profitability was due among other things to high tax rates and persistent real appreciation (Figure 3a).

On the fiscal side, macroeconomic policy in 2001 was marked by the break in the process of adopting the norms accepted by the world's advanced economies, and there was even some movement away from them, while on the monetary side the disinflation process was completed with the convergence to price stability. In the years 1996–2001 the overall budget deficit hovered around an average of 4 percent of GDP, and the shares of public expenditure and the tax burden remained at 54 percent and 40 percent of GDP respectively. This contrasts with the experience of most OECD countries in the same period, where deficits declined drastically or even turned into surpluses, with the share of public expenditure declining and the tax burden rising slightly.<sup>2</sup> Inflation fell in this period from about 10 percent a year to the range defined as price stability which has prevailed since 1999. This was due among other things to the tight monetary policy, reflected from 1998 to 2000 by a rise in the real short-term interest rate (the Bank of Israel's interest rate deflated by twelve-month inflation expectations) to 7 percent; in 2001 monetary policy eased somewhat, with the real interest rate declining to an average of 5 percent.

The composition of uses in 2001 indicates that exports were at the forefront of the slowdown; these fell by 10 percent in volume (excluding diamonds), after rising by 25

<sup>2</sup> The share of public expenditure in GDP in Israel is higher than that of every OECD country, and is 13 percentage points higher than the average; the share of the tax burden is 3 percentage points higher in Israel than in the OECD.

On the fiscal side, macroeconomic policy was marked by the break in the process of adopting the norms accepted by the world's advanced economies, and in 2001 there was even some movement away from them.

percent in 2000, and by 10 percent in each of the years from 1997 to 1999. In contrast to the drop in exports, domestic uses (excluding direct defense imports) rose by 1.5 percent, although this was far slower than their increase in 2000 (Table 2). The most notable features of the change in uses was the rise in public and private consumption (excluding durables) and the sharp decline in investments. Public consumption rose by 2.9 percent in volume, due mainly to an increase in civilian consumption and to some extent to a rise in defense expenditure resulting from the security situation. Private consumption went up by 3.3 percent, i.e., a rise of about 1 percent in per capita consumption. The rise in private consumption in 2001 was partly the result of the increase in the real wage, and was consistent with the 3 percent rise in disposable income from all sources, while GDP fell. Investment, the share of which in GDP has been falling in the last few years, declined sharply in 2001. Nevertheless, it is still at a high level, reflected by a 5 percent increase in capital stock to the beginning of 2002.

Despite the recession, the annual rate of unemployment rose relatively slowly in 2001 to 9.3 percent of the civilian labor force (i.e., 233,000 unemployed persons). Unemployment started rising only in the third quarter, and by the end of the year had reached 10.2 percent. Unemployment, which reacted to the recession with a lag, as it does in most business cycles, did so more moderately as a result of a large increase in the number of employees in the public sector.<sup>3</sup> As economic activity slowed, labor input in the business sector contracted by 3.5 percent, and affected most industries, particularly agriculture, and hotels and catering, which were affected directly by the *intifada*. The decline in labor input in the business sector also reflected the drastic reduction (80 percent) in the number of Palestinian workers (with a 15 percent increase in the number of foreign workers), while the number of Israeli employees in the sector continued to rise, albeit by a modest 1.4 percent. The real wage per employee post, excluding Palestinian workers, rose by 2.5 percent on average, 2.5 percent in the business sector and 2.7 percent in the public sector, after rising significantly also in 2000, and exceeding the minimal increase in productivity. The effects of the recession on wages started appearing as the year progressed, and in the second half of the year the real wage dropped, led by the construction and financial services industries.

The balance-of-payments current account deteriorated somewhat in 2001, and the deficit came to \$1.7 billion, at current prices, up from \$1.4 billion in 2000. This was due to a large fall in exports of both goods and services, and a more moderate decline in imports. In terms of the saving and investment account, the deterioration reflects the drop in the national saving rate, mostly in public saving, together with a smaller decline in the investment rate (Table 3). A rise in the current-account deficit is atypical of a period of recession, and it occurred as a result of the special characteristics of the current recession which was led by exports, in the same way as growth in 2000, which was also led by exports, led to a reduction in the deficit. The main reason for the fall in

<sup>3</sup> This includes, in addition to employees of the general government, those private-sector employees employed in public services such as education and health and welfare. A large part of the payment to the private sector for its activities in these areas is made via the general government. The figure relating to the number of general government employees is biased further as some are employed via employment agencies, and are therefore sometimes classified under the business services industry.

The slowdown was led by exports, which declined by 10 percent in volume after rising by 25 percent in 2000.

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The effects of the recession on wages started appearing as the year progressed, and in the second half of the year the real wage went down.

Israel's exports fell by relatively far more than did world trade, as high-tech exports play such a significant role in them.

the volume of goods exports was the worldwide slowdown which reduced world trade, and in particular the crisis in high-tech industries. Israel's exports fell by relatively far more than did world trade, as high-tech exports play such a significant role in the former, and led to rapid expansion of exports in the last few years. Exports of services were greatly affected by the huge drop in the export of tourist services resulting from the security situation, a decline which worsened following the events of 11 September, and by the fall to almost zero of exports of start-up companies due to the worldwide crisis in the high-tech industries. The decline in imports consisted of a reduction in factor-input services, and a contraction of goods imports, due to the lower level of activity. The marked drop in factor-input services can be explained by reduced payments of dividends to nonresidents on profits arising from the sales of start-ups, and by the reduction in wage payments to Palestinian workers, which was only partially offset by a certain rise in the number of foreign workers.

Inflation was lower than the target for the third year in succession, but was within the long-term target range of 1–3 percent, defined as price stability.

The CPI rose by 1.4 percent in 2001; inflation was lower than the target for the third year in succession, but was within the long-term target range of 1–3 percent, defined as price stability. Prices did not change uniformly over the year: in the first half they increased by 1.1 percent, while in the second half they remained virtually unchanged, as the rise in the third quarter was almost entirely offset by the reduction in the last quarter (Figure 2a). Following continuous reductions in the interest rate since the beginning of the year, inflation expectations and the Bank of Israel forecasts of inflation in September and October approached the upper limit of the target range for 2001, and it appeared that the changed trend would persist; as a result, the reductions in the interest rate were brought to a temporary halt. They restarted in November, when inflation expectations and forecasts went down again (Figure 2b).

The gradual and cautious cuts in the interest rate lent stability to the financial and foreign currency markets, something which cannot be taken for granted in the light of the rapid increase in the budget deficit and the domestic and external shocks to the market.

As in the past few years, monetary policy in 2001 focused on achieving the inflation target while maintaining stability, and was reflected by steady and almost continuous reductions in the Bank of Israel's interest rate. It seems that the recession—expressed as a decline in business-sector product and a widening of the output gap—the intensity of which only became apparent towards the end of the year, acted more strongly than had been anticipated in holding back the rate of price increases, so that inflation fell below the target range. It is important to stress, however, that the preservation of stability, reflected in the gradual and cautious cuts in the interest rate, lent stability to the financial and foreign currency markets, something which cannot be taken for granted in the light of the rapid increase in the budget deficit and the domestic and external shocks to the market.

The budget deficit increased to 4.6 percent of GDP, compared with the target of 1.75 percent.<sup>4</sup> Most of the deviation of the deficit from the target was due to the short-fall of revenues, both tax and non-tax, from the forecast, mainly because of the recession, and to prices rising more slowly than had been assumed in preparing the budget. Nominal government expenditure rose in accordance with the budget, but as prices rose more slowly than had been assumed, the real rise in expenditure was greater than

<sup>4</sup> About half a percent of GDP of the 2001 deficit is due to the postponement of the transfer of part of the US economic aid for 2001 to 2002.

planned. The rise of 5 percent in real terms (deflated by the business sector-product deflator) on the heels of a similar rise in 2000, while GDP marked time, increased the share of public expenditure in GDP to 54 percent, higher than that in any of the OECD member countries. The rise in expenditure—most of which was in current civilian expenditure, particularly wages and transfer payments, and to a lesser extent in defense spending, and not on investments—is likely to persist. The tax burden, which had risen to 41 percent in 2000, higher than in the 1990s, stayed at this level in 2001. These budgetary developments were reflected in a reversal of the downward trend of the gross public debt, which rose to 98.1 percent of GDP in 2001 from 93 percent in 2000 (Table 4). Israel's debt, deficit, expenditure, and tax relative to GDP are all high compared to the accepted norms in the advanced countries. Nevertheless, Israel's reaction to the severe recession, increasing the deficit further, was more acute than those of the OECD member countries, which reduced their budget surpluses by an average of half a percent of GDP. They did so mainly by cutting taxation, while Israel increased its deficit by about 4 percent of GDP, far in excess of what could be attributed to the severity of the recession.<sup>5</sup>

Government expenditure rose (in nominal terms) in line with the budget, but as prices went up more slowly, the real rise was higher than that planned.

**Table 1b**  
**Basic Economic Data: An International Comparison, 1990–2001**

	(percent)								
	1990			2001			1991–2001 average		
	Israel	G7 <sup>b</sup>	OECD <sup>c</sup>	Israel	G7	OECD	Israel	G7	OECD
Population growth rate <sup>a</sup>	3.1	0.7	0.5	2.4	0.5	0.5	3.2	0.6	0.7
GDP growth rate	6.2	2.6	3.1	-0.6	0.8	0.9	4.4	2.4	2.1
Per capita GDP growth <sup>a</sup>	3.1	1.9	2.6	-2.8	0.3	0.4	1.5	1.8	1.4
Per capita GDP <sup>a</sup> (\$'000s, current prices)	11.3	21.6	16.9	17.2	31.0	27.1	15.6	27.7	21.1
Unemployment rate	9.6	5.6	5.9	9.3	6.0	6.5	8.8	6.5	7.0
Inflation rate (average)	17.2	5.0	10.2	1.1	1.1	2.9	8.2		
Inflation rate (during year)	17.6	5.2	9.9	1.4	2.1	3.6	8.2	2.4	4.5
Current-account deficit <sup>a</sup> (-) (percent of GDP)	0.3	-0.5	-0.6	-1.5	-1.6	-1.2	-3.1	-0.4	-0.3
Net public debt <sup>a</sup> (percent of GDP)	144.7	60.0	57.0	84.3	47.9	43.4	91.7	49.1	45.1

<sup>a</sup> Figures for the G7 and OECD countries for 2001 (and for the 1991–2001 average) are estimates.

<sup>b</sup> G7 countries: US, UK, Germany, Italy, Japan, France, Canada.

<sup>c</sup> Organization for Economic Cooperation and Development.

SOURCE: OECD *Economic Outlook, 2001*; *World Economic Outlook, 2001*, and Bank of Israel annual reports.

<sup>5</sup> The high-tech oriented Southeast Asian countries (Hong Kong, Korea, Singapore and Taiwan), whose economies were severely affected by the slump in those industries (see Box in Chapter 1 of the accompanying Research Department report) increased their general government deficits (or reduced their surpluses) by less than Israel did.

Towards the end of the year the recession became more severe, and the government decided to amend the forecast growth figure underlying its budget, and to cut back significantly on the original budget proposal, reverting to a downward deficit path, with the deficit declining from 3 percent of GDP in 2002 to 1 percent of GDP by 2005. Against this setting, an agreement was reached covering the adoption of several policy measures, including an exceptional 2 percentage-point reduction in the Bank of Israel interest rate, and a number of structural changes to the money markets which would increase the Bank's flexibility in operating the monetary instruments, advance the liberalization process in the foreign currency market towards its completion at the end of 2002, and help (a little) to make the exchange-rate regime more flexible. The view was taken that under the prevailing conditions it would be possible to maintain price stability at a lower rate of interest.

The real appreciation<sup>6</sup> of the NIS which was evident during the 1990s continued in 2001, albeit at a slower rate (Table 7). Real appreciation persisted despite nominal depreciation and the moderate rise in business-sector-product prices, and was affected by the fall in import and export prices (in dollar terms). The widening of the interest-rate differential during the year between Israel and abroad, which resulted from the faster reductions in interest in the US than in Israel, prevented more rapid depreciation of the NIS. Be that as it may, it is doubtful whether such depreciation, with the dampened level of demand abroad, would have offset the adverse effects on exports to any significant degree. Nevertheless, in the light of the recession in economic activity, the sharp cut in the interest rate at the end of the year, if accompanied by fiscal discipline, is likely to create real depreciation which could help exports recover quickly once there is a revival in world demand.

An ex-post analysis of macroeconomic data relating to 2001 raises the question whether a macroeconomic policy mix different from that adopted would have helped encourage activity in 2001 or create conditions making it easier to get onto a path of future sustainable growth when external factors improve.<sup>7</sup> In particular, would a faster rate of reducing the Bank of Israel interest rate have created real depreciation, could such depreciation have encouraged higher export growth while meeting the inflation target, and would a smaller budget deficit and a different composition of expenditure have helped boost growth in 2001 and the next few years? Based on quantitative estimates of the relation between interest and inflation it may be estimated that a slightly faster rate of interest-rate reduction amounting to an extra reduction of 1 to 1.5 percentage points over the year would have brought inflation into the target range for the year and might have helped create a certain measure of real depreciation, especially if fiscal policy would have helped to curtail the rise in the deficit. Restricting the rise in the deficit (compared to that in 2000) to the 'automatic stabilizers' alone would have increased the budget deficit to 2.3 percent of GDP (excluding the deferment of the US

<sup>6</sup> The real exchange rate is defined here as the ratio of export prices to the business-sector-product deflator.

<sup>7</sup> It is obvious, but still worth mentioning, that an ex-post analysis of policy uses information some of which at least was not available at the time policy decisions were made, such as the sharp fall in tax income and the price reductions in the fourth quarter of the year.

economic aid) instead of the actual rise to 4 percent of GDP. In other words, the actual deficit rose by 1.7 percent of GDP more than the rise deriving from the slowdown in activity. This excess increase is the result of the asymmetry between the effect of lower than expected prices on expenditure and that on income (via the release of the price reserve), an increase in transfer payments (not deriving from the recession), and an overestimate of non-tax income. Thus, in effect the policy adopted was ‘actively countercyclical,’ in addition to the operation of the automatic stabilizers.

It would be reasonable to adopt such an actively countercyclical policy once the credibility of the debt- and deficit-reduction strategy is established. This credibility depends on where along the process the economy is situated. After a sufficiently long period when debt, public expenditure and taxation relative to GDP have declined steadily towards the internationally accepted levels, the credibility of the policy will be strengthened, and a countercyclical policy would not be interpreted as an abandonment of the process towards these standards. On the other hand, in a situation where there is a lack of credibility in the policy, an expansionary countercyclical policy might have the effect of reducing activity, as the public internalizes the future taxation needed to cover the rise in public expenditure which is perceived as likely to persist. Moreover, lack of credibility creates uncertainty among foreign and domestic investors who respond by cutting back on their investments, and by requiring a higher rate of return on them. This reaction will itself have a moderating effect on activity, which is likely to grow stronger the longer the deviations from targets persist.

The above analysis shows that faster reductions of interest by the Bank of Israel combined with fiscal discipline which would have curtailed the deviation of the deficit from its target to that determined by the automatic stabilizers, half a percent of GDP, would have reduced the amount by which the deficit and inflation deviated from their targets in 2001. This policy would not have made a great contribution to growth in 2001, because of the intensity of the external shocks. Nevertheless, it would have enabled a smoother, more gradual move towards the policy mix eventually chosen for 2002—some monetary expansion and a return to fiscal discipline, a combination which, if implemented according to plan, will support real depreciation and thereby help a return to growth.

## 2. REAL ECONOMIC DEVELOPMENTS

After unprecedented rates of growth from mid-1999 to the third quarter of 2000, there was a sharp reversal in activity in the fourth quarter of 2000, and the economy slid rapidly into recession, which intensified during 2001 (Table 2). GDP fell by 0.6 percent in 2001, and business-sector product by 1.9 percent. Excluding the activity of start-ups, business-sector product declined by 0.6 percent. In the same way as exports and the activity of start-ups had led the sharp rise in activity in the previous six quarters, they led the slump in activity in 2001: the output of start-ups, which had surged by 209 percent in 2000, plunged by 32 percent in 2001. On the other hand, domestic uses continued to expand, and increased by 1.5 percent, far more slowly than the rise of 3.1 percent in 2000. Thus, in the short term, the increase in private and public con-

In a situation where there is a lack of credibility in the policy, an expansionary countercyclical policy is likely to have the effect of reducing activity, as the public internalizes the future taxation needed to cover the rise in public expenditure which is perceived as likely to persist.

Faster reductions of interest by the Bank of Israel combined with fiscal discipline which would have curtailed the deviation of the deficit from its target to half a percent of GDP would have reduced the deviation of both the deficit and inflation from their targets in 2001.

In the same way as exports and the activity of start-ups had led the sharp rise in activity in the previous six quarters, they led the slump in activity in 2001.

sumption prevented a deeper recession (see Chapter 1 of the accompanying Research Department report).

The growth of private consumption despite the recession in economic activity and the high rate of unemployment apparently derived from the persistent rise in the real wage.

Private consumption grew by 3.3 percent in 2001 in real terms (about 1 percent per capita), slower than the rise of 6.6 percent in 2000, but similar to the increase in 1999. The increase reflected a rise in current consumption, whereas purchases of durables fell after rising considerably in 2000. The growth of private consumption despite the recession in economic activity and the high rate of unemployment apparently derived from the persistent rise in the real wage and the relatively high propensity to consume wage income. The rise in private consumption is consistent with the 3 percent increase in disposable income from all sources, despite the drop in GDP.

Gross domestic investment went down by 3.9 percent in 2001, continuing the decline in 2000. Total domestic investment *minus* the rise in inventory (investment in

**Table 2**  
**Sources and Uses in 1997-2001<sup>a</sup>**

	1997-		2000-		2001			
	1999	2000	2001	2001	I	II	III	IV
Sources and uses								
GDP	2.9	6.4	-0.6	2.8	1.3	-3.2	-5.2	-6.6
GDP excluding start-ups	2.7	4.4	0.4	2.4	2.1	-0.5	-3.6	-6.4
Business-sector product	3.0	8.5	-1.9	3.2	0.4	-6.2	-6.6	-9.9
Business-sector product								
Excluding start-ups	2.7	5.7	-0.6	2.5	1.5	-2.5	-4.4	-9.6
Private consumption	3.8	6.6	3.3	4.9	5.4	2.2	4.5	-5.3
Excluding durables	4.1	5.1	3.9	4.5	4.8	6.1	6.2	-5.2
Public consumption	2.4	1.1	2.9	2.0	1.8	3.0	-2.2	12.1
Fixed investment	-1.4	1.1	-6.6	-2.8	1.8	-18.8	-4.8	-24.5
Nonresidential	0.3	4.3	-4.3	-0.1	9.7	-22.0	-0.1	-37.1
Residential	-5.0	-7.2	-12.8	-10.1	3.1	-7.7	-3.6	-1.8
Domestic investment excluding								
stock of start-ups	-1.2	-7.4	-6.2	-6.8	-5.0	-22.0	-21.9	-41.6
Exports	8.7	23.9	-11.0	5.0	-2.2	-20.7	-16.9	-1.6
Excluding diamonds	10.5	25.3	-10.1	6.1	15.5	-22.9	-25.5	0.2
Excluding start-ups	8.7	19.3	-7.4	5.1	-21.7	0.0	-12.5	-6.1
Tourism exports	2.5	1.6	-41.4	-22.8	-10.3	-61.8	-27.3	-38.5
Goods exports	7.7	22.3	-8.1	6.0	-18.3	-18.0	-11.8	2.5
Uses	3.9	8.2	-1.8	3.1	1.4	-9.1	-5.8	-10.7
Imports	6.5	12.2	-4.4	3.6	-12.0	-14.3	-14.8	-9.3
Excluding defense imports,								
ships, planes and diamonds	5.8	15.0	-4.2	5	-11.9	-10.3	-10.4	-16.5
Domestic uses	2.5	3.1	1.5	2.3	4.0	-4.0	-0.5	-18.2
Unemployment rate <sup>b</sup>	8.3	8.8	9.3	9.1	8.6	8.7	9.6	10.2
Business-sector employment <sup>c</sup>	1.4	4.4	1.4	3.0	-0.2	5.4	-1.0	-4.8
Average hours worked <sup>d</sup>	-0.2	1.5	-2.2	-0.4	-3.9	-0.3	-7.9	0.0

<sup>a</sup> Seasonally adjusted data; rates of change over preceding period, in annual terms.

<sup>b</sup> Percentage of labor force.

<sup>c</sup> Rate of change of number of Israeli employees in the business sector.

<sup>d</sup> Average of hours worked per Israeli employee in business sector (rate of change).

SOURCE: Based on Central Bureau of Statistics data.

capital assets) fell by 6.6 percent, after rising moderately in 1999 and 2000. This decline reflects the marked drop in construction activity and in housing investment, but also the reduction in other components of investment. Investment in the principal industries declined by 4.3 percent after rising by the same amount in 2000, so that gross business capital stock to the beginning of 2002 will be about 5 percent greater than a year earlier. This is a lower increase than in 2000 (6.6 percent), but is similar to that of potential growth.<sup>8</sup> There were two main causes for the decline in investment in 2001: the first was growing security-related and economic uncertainty, mainly due to the terrorist attacks in Israel and the worldwide economic slowdown, which resulted in the deferment of investments. The second reason was the fall in economic activity and the sharp decline in share prices, reflecting investors' expectations of a reduced income flow from the projects in which they invested. Other factors which contributed to the decline in expected receipts included the persistent fall in the return on capital, due to the rise in the real wage outstripping the rise in labor productivity, the rise in the capital/GDP ratio, and the sharp increase in unit labor cost (Table 5). The downward trend of housing investment accelerated in 2001, with the fall reaching 12.8 percent. This reflects the effect of the security situation and the uncertainty it causes, which reduces both the demand for housing and the supply, due to the sharp reduction in the number of Palestinian workers. The lower demand for investment in housing and commercial property due to the recession became the dominant effect in 2001, and led to a fall in prices. Investment in buildings and in earth works went down by 7.3 percent, and in machinery and equipment by 8.6 percent. The slowdown also affected investment in non-tangible assets (software) which declined by 1.1 percent, following significant increases in the last few years.

The lower demand for investment in housing and commercial property due to the recession became the dominant effect in 2001, and led to a fall in prices.

**Table 3**  
**Saving, Investment, and the Current Account, 1990–2001**

	(percent of total revenue, annual rates)						
	1990–92	1993–96	1997	1998	1999	2000	2001
Gross saving rate	20.2	19.6	19.3	19.6	19.1	19.3	18.0
Public	–0.6	–0.4	–1.3	–1.3	–2.2	–0.5	–1.6
Private	20.8	19.9	20.6	20.9	21.4	19.7	19.6
Gross investment	21.2	23.9	22.9	20.8	21.9	20.4	19.5
<i>of which</i> Business sector	12.7	15.7	15.0	14.4	14.9	14.2	13.2
Current account of							
balance of payments	–1.0	–4.3	–3.6	–1.1	–2.7	–1.2	–1.5

SOURCE: Based on Central Bureau of Statistics data.

The direct effect of the deterioration in the security situation and the worldwide economic slowdown on business-sector product (relative to potential growth) in 2001 is estimated at about 6 percent of GDP. This does not take into account indirect aspects

<sup>8</sup> The estimate of the increase in effective capital stock might be biased upwards, as in periods of structural and technological change the effective discard rate is likely to be faster than that used in the estimate of capital stock.

The direct effect of the deterioration in the security situation and the worldwide economic slowdown on business-sector product in 2001 is estimated at about 6 percent of GDP.

of the shocks on consumption and investment which follow on from the direct effects. It seems therefore that macroeconomic policy could only act on the margin to prevent further deterioration. Macroeconomic policy will be judged by its ability to support a rapid recovery from the recession and its success in placing the economy on a path to sustainable growth once the world economy, led by that of the US, starts recovering.

### 3. FISCAL DEVELOPMENTS

In 2001 fiscal policy departed from its path towards the standards of fiscal management accepted in the advanced countries, a departure reflected by an increase in the share of public debt, public expenditure, deficit, and taxes in GDP. The large deviation of the deficit from its target in 2001, and the upward revision of the targets for the next few years, combined with the rate of increase in and the composition of public expenditure in 2000 and 2001 cast a shadow over the nature of the deviation from the path (see Chapter 3 of the accompanying Research Department report).

The share of the public sector in GDP increased considerably in 2001 and reverted to the level of the mid-1990s, about 54 percent (Table 4). For comparison, the share was 52.2 percent in 2000, and the average rate in the OECD countries is 42 percent.<sup>9</sup> This reflects a significant real rise of about 6 percent (adjusted by the business-sector-product deflator) in current expenditure of the public sector. The rise encompassed public consumption as well as transfer payments, whereas expenditure on the capital account did not increase, and direct investments actually went down slightly.<sup>10</sup> The increase in defense expenditure explains only about one fifth of the rise in the share of public expenditure; the rest of the increase came from a rise in civilian expenditure. The two items boosting civilian expenditure were the marked acceleration in volume growth (of about 3.2 percent compared with 1.6 percent in 2000) including a rise in labor input, and a continued rapid increase in the prices of public consumption (including the hourly wage) adjusted by the business-sector-product deflator. Transfer payments went up by 13 percent and their share in GDP rose by 1 percentage point. This reflects the rapid increase in the number of those entitled to receive them and a rise in the size of the allowances resulting from the increase in the average wage (to which most transfers are linked) and from statutory changes (the Large Family Law, and the rise in payments to the disabled). Only about 20 percent of the rise in National Insurance payments are attributable to increases in unemployment pay and income support, only marginally higher than their share in total allowances.

The tax burden rose from 39 percent in 1999 to 41 percent in 2000, and stayed at that level in 2001, having remained stable throughout the 1990s. Most of the increase in the tax burden, about half a percent of GDP, was in direct taxes (including payments to the National Insurance Institute), while the share of indirect taxes dipped. The rise

<sup>9</sup> The difference in defense expenditure between Israel and the average of the OECD countries accounts for about half of the difference between the level of public expenditure in Israel and that in the OECD.

<sup>10</sup> In contrast, investment in the transport infrastructure not financed by the government increased (e.g., in the cross-Israel highway).

**Table 4**  
**Main Indicators of Fiscal Policy, 1990–2001**

	(percent of GDP, annual rates)										
	1990–92	1993	1994	1995	1996	1997	1998	1999	2000	2001	
Overall public-sector deficit	4.3	4.4	3.2	4.5	5.9	4.5	3.8	4.8	2.2	3.8	
Public-sector domestic deficit	7.3	6.2	4.4	5.6	7.0	5.8	5.2	5.6	3.1	5.0	
Net overall public-sector debt	111.8	100.5	91.1	88.4	88.4	86.0	85.5	88.2	80.2	84.3	
Gross overall public-sector debt	133.3	124.6	116.6	109.6	107.9	105.0	108.1	101.9	92.8	98.1	
Total public-sector expenditure <sup>a</sup>	57.1	56.4	54.1	55.3	55.2	53.8	53.6	53.2	52.2	54.1	
Total taxes <sup>a</sup>	38.3	38.9	39.8	39.9	38.9	39.6	38.9	39.1	41.0	40.8	
Ceiling on domestic budget deficit <sup>b</sup>	6.2 <sup>d</sup>	3.2	3.0	2.8	2.5	2.3	2.2	2.6	2.8	0.5	
Actual domestic budget deficit	4.9 <sup>d</sup>	2.3	1.9	3.1	4.5	3.0	2.9	2.8	0.5	3.8	
Ceiling on overall budget deficit including Bank of Israel profit <sup>c</sup>	8.5 <sup>d</sup>	4.4	3.5	3.8	3.6	2.8	2.4	2.0	2.5		
Ceiling on overall budget deficit	8.5 <sup>d</sup>	4.7	3.8	3.9	3.7	3.0	2.8	3.1	3.6	1.8	
Actual overall budget deficit including Bank of Israel profit	3.8 <sup>d</sup>	2.4	2.3	4.0	3.8	2.7	2.3	2.5	0.1		
Actual overall budget deficit	4.0 <sup>d</sup>	2.5	2.3	4.4 <sup>e</sup>	4.2 <sup>e</sup>	3.4	3.3	3.4	0.7	4.6 <sup>f</sup>	

<sup>a</sup> As of 1995 expenditure and taxes include government transfers to the health funds and national health insurance tax in accordance with the National Health Insurance Law.

<sup>b</sup> Until 1996 the deficit ceiling as prescribed by law; from 1997 the planned deficit (excluding credit extended). The gap between the planned and actual deficit includes about 0.15 percent of GDP reflecting income listed as domestic at the time the budget was planned but recorded as income abroad in the implementation figures.

<sup>c</sup> Until 1996 the planned deficit; from 1997 the deficit ceiling as prescribed by law.

<sup>d</sup> For 1992 only.

<sup>e</sup> Until the end of 1995 the US economic aid for that year had not been received, and was therefore recorded as an income of NIS 3.1 billion in 1996 (above one percent of GDP). If it would have been received on time, the actual overall budget deficit for 1995 would have been 3.2 percent of GDP, and that for 1996 would have been 5.2 percent of GDP.

<sup>f</sup> The US economic aid was not received in 2001. If it would have arrived the overall budget deficit would have been 4.0 percent of GDP.

SOURCE: The National Budget, and based on Central Bureau of Statistics data.

The tax burden rose from 39 percent in 1999 to 41 percent in 2000, and stayed at that level in 2001, having remained stable throughout the 1990s.

in the tax burden and in current expenditure, a significant part of which is of a permanent nature, reducing the potential to reduce the burden in the future, acts counter to the objective of steering the economy back onto a path of sustainable growth. In addition, the relatively high tax burden (even before its rise in 2000) and its composition are in part responsible for the low growth rates of business-sector product and the reduction in productivity in the last decade.<sup>11</sup>

The combination of the rapid rise in public expenditure and the far slower increase in income resulted in a marked expansion of the 3.8 percent of GDP in the general government deficit; the overall central government budget deficit (excluding credit advanced), the path of which is legally determined, reached 4.6 percent of GDP in 2001 (about half a percentage point of this was due to the postponement of the transfer of some of the US economic aid from the end of 2001 to the beginning of 2002). The budget deficit deviated by almost 3 percent of GDP from its target of 1.75 percent. This was mainly due to domestic receipts from taxes and other sources falling by more than had been forecast, especially as the rise in prices was below what was expected, and to the slowdown in activity, while expenditure rose at the rate planned in the budget. The rise in nominal expenditure in accordance with the budget meant that the real rise was higher than that planned, because prices rose by less than expected in the budget, as stated above, and yet the price reserve was released, mainly due to the rise in the real wage. The increase in the deficit, together with the depreciation of the NIS towards the end of the year which increased the foreign currency debt, were reflected in the rise in the share of gross public debt in GDP to 98.1 percent, a rise which is expected to increase the cost of servicing the debt in the next few years.

The policy pursued in 2001 may be described as actively countercyclical to some extent.

The policy pursued in 2001 may be described as enabling the automatic stabilizers to operate, and to some extent as actively countercyclical. An attempt to offset fully the reduction in income due to the recession, i.e., fully offsetting the automatic stabilizers, by raising taxes or sharply cutting back on expenditure in order to meet the target deficit, would have constituted excess constraint in the prevailing economic conditions. The upper limit of the deficit determined for 2001, which was about 1 percentage point higher than the actual deficit in 2000, allowed some leeway for the expression of the automatic stabilizers. However, the real rise in expenditure in excess of that planned deviated from the extent of the operation of the automatic stabilizers, and undermined credibility of economic policy. The return to the downward deficit path set by the government for 2002 and thereafter is vital to avoid the negative effects of loss of credibility of fiscal policy.

#### 4. THE LABOR MARKET

The sharp slowdown in economic activity in 2001 was reflected in the slack in the labor market—the total number of employed persons did not change, the rate of unem-

<sup>11</sup> See Y. Lavi and M. Strawczynski (2001) "Policy Variables and Growth: Evidence from Israel," *Applied Economics Letters*.

ployment rose, and the rise in the real wage slowed down during the year. The trends in unemployment and wages did not change until the middle of the year, and thus responded, with the typical lag, to the recession. The number of employed persons in the business sector went down by 1.5 percent, or 28,000 workers. This was made up of a decline of 83,000 Palestinian workers, and an increase of 22,000 Israeli employees and 33,000 foreign workers. On the other hand, employment in the public services rose steeply by 4.4 percent. Although the rate of unemployment remained steady in the first half of the year,<sup>12</sup> it rose in the third and fourth quarters of the year, reaching 10.2 percent by the year-end. The average participation rate, 54.4 percent, remained similar to its level in 2000. The real wage in the business sector, which went up by 3.3 percent annual average (including Palestinian workers), changed direction in mid-year and dropped by 1.8 percent in the second half compared to the first half (see Chapter 2 of the accompanying Research Department report for a full discussion).

The contraction in business-sector employment (including Palestinian and foreign workers) covered most industries, and was particularly marked in agriculture, construction, and hotel and catering services. The decline in the first two reflects the deterioration in those industries, which became even more intense due to the security situation, which resulted in an 80 percent drop in the number of Palestinians employed.

Employment of Israelis was affected by the fall in demand for labor and the sharp contraction in the number of Palestinian workers. The number of Israelis employed in construction and tourism rose slightly, and the number of foreign workers in them rose considerably, partially offsetting the drop in the number of Palestinian workers. On the other hand the number of Israelis employed in agriculture and manufacturing went down in line with the decline in the number of Palestinian workers. The considerable increase, 7 percent, in the number of Israelis employed in business services following a 15 percent rise in 2000 offset the sharp decline in the number of Palestinian workers in these industries.<sup>13</sup> The total number of Israeli employees in the business sector increased by 1.4 percent lower than the rise in the labor force, so that this sector contributed 1 percentage point to the rise in the rate of unemployment. The significant increase of 4.4 percent in the number of Israelis employed in the public sector offset about half a percentage point in the rise in the rate of unemployment.

The average real wage per employee post (excluding Palestinian workers)<sup>14</sup> rose by 2.1 percent in 2001 compared to its level in 2000, reflecting a 2.5 percent rise in the real wage in the business sector and a 2.7 percent rise in the public sector. The rise in the business sector continued its marked increase in the last few years, and encom-

The sharp slowdown in economic activity in 2001 was reflected in the standstill in the number of employed persons, the rise in the rate of unemployment, and the slowdown in the rise in the real wage during the year.

The total number of Israeli employees in the business sector increased by 1.4 percent, lower than the rise in the labor force, so that this sector contributed 1 percentage point to the rise in the rate of unemployment.

<sup>12</sup> The stability reflects a downward bias in the rate of unemployment in the first half of the year, as the estimate of employed persons includes a significant rise in the number of temporary absentees from work, who are recorded as being employed, although many of them are not expected to return to work.

<sup>13</sup> Annual data for the change in employment in the two-digit industries in the business services industry are unavailable. Based on data for the first half year it seems that the number of Israeli employees rose just in those industries which do not have a high intensity of Palestinian workers, and thus was not a response to the reduction in the number of the latter.

<sup>14</sup> The wage per employee post including Palestinians rose by more than this, as the rate of Palestinian workers declined sharply. This change in the composition of workers contributed significantly (about 1 percentage point) to the rise in the average real wage.

passed most industries. The hourly wage rose even faster than the real wage per employee post because the average number of hours worked per employee fell by 2.6 percent (2.2 percent excluding Palestinian workers). However, the wage in the business sector did start to react to the slack in the labor market, and in the second half it dropped by 2.8 percent from its level in the first half. The annual average thus reflects some wage rigidity, evident in the lagged reaction of the wage to the decline in demand for labor. Several factors played a part in the rise in the average wage: a 10.2 percent rise in the minimum wage in April pushed it up, as about 15 percent of wage-earners earn up to the minimum wage, and it also affected the wage level for those earning close to the minimum. Nevertheless, the relatively low compliance levels reduce the effect of the minimum wage on the average wage. The differential between the actual and the expected rate of price rises when agreements were signed can explain only a small part of the rise in the real wage in 2001, especially as the agreements were meant to correct the deviation in 2000 of the real wage from that intended. Part of the rise in the real wage may also be explained by the changed composition of employment in the business sector—a rise in the share of industries paying above average wages.<sup>15</sup>

The rise in the wage in 2001 reflects wage rigidities, evident in the lagged reaction of the wage to the decline in demand for labor.

**Table 5**  
**The Business Sector: Selected Data, 1990–2001**

	(percent, in annual terms)						
	1990–92	1993–96	1997	1998	1999	2000	2001
Rate of growth of business-sector product	7.9	6.7	3.0	2.9	2.4	8.5	–1.9
Rate of growth of domestic labor input	5.5	7.4	2.9	1.2	4.1	5.8	–3.5
Civilian labor force	5.0	3.8	2.9	2.6	3.5	3.8	2.8
Labor supply <sup>a</sup>	5.2	4.2	4.0	3.9	4.3	3.9	0.7
Nonresidents' share in the business-sector	9.0	9.3	14.7	15.0	15.9	15.9	13.5
Rate of increase of gross capital stock	2.9	7.3	8.6	8.5	7.4	7.2	6.6
Rate of increase of total productivity	3.1	–0.7	–1.6	–0.6	–2.6	2.2	–1.6
Rate of return on gross capital <sup>b</sup>	13.7	14.1	12.9	13.2	12.5	13.3	10.6
Rate of change of the average real business-sector wage <sup>c</sup>	–1.6	0.5	3.4	3.0	3.6	6.6	3.3
Labor cost per unit of output in the business sector	–3.3	2.2	0.4	0.5	1.3	–0.5	5.5
Change in the real minimum wage	–1.8	1.2	4.6	5.4	2.2	4.9	7.9

<sup>a</sup> Civilian labor force *plus* foreign workers *plus* Palestinian workers.

<sup>b</sup> Before tax.

<sup>c</sup> Including Palestinian workers.

SOURCE: Based on Central Bureau of Statistics data.

The rise in the real wage far exceeded that in productivity (GDP per hour), so that unit labor cost rose sharply by 5.5 percent (Table 5). Business-sector productivity has risen by a (nominal) 6 percent a year in the last five years, while pay per man-hour rose by 7.6 percent, so that unit labor cost has risen by 1.7 percent, annual average. Such a rise thus reflects a marked erosion of business-sector profitability and creates a burden especially at a time of weakened demand, as this is expected to contribute to a reduction in labor demand, i.e., to a further rise in unemployment.

Unit labor cost rose sharply by 5.5 percent.

## 5. THE BALANCE OF PAYMENTS

The current-account deficit deteriorated to some extent in 2001, and amounted to \$1.7 billion, constituting 1.5 percent of GDP, compared with 1.2 percent of GDP in 2000 (Table 6).<sup>15</sup> The increase in the current-account deficit expresses the reduction of the national saving rate (due to the fall in the public saving rate) alongside a drop—albeit more moderate—in the investment rate (Table 3). The fall in the public saving rate, which largely expresses the fall in tax revenues and rise in current expenditure, could reverse as the country emerges from recession and returns to fiscal discipline. Hence, even if investment persists at its current rate, assuming that its level also reflects the structural and technological changes in the economy, the current-account deficit might yet fall. In the short run, as long as uncertainty prevails, the improvement in the current account may derive from a further decline in investment. In any case, the current-account deficit in 2001 was less than direct investment by nonresidents and than total investment by nonresidents, and thus did not serve to increase the external debt, which was about 4 percent of GDP at the end of the year. In consequence, the balance of payments did not contribute to the creation of real depreciation in 2001.

The increase in the current-account deficit expresses a decline in the national saving rate, alongside a more moderate fall in the investment rate.

The two main factors affecting economic developments—the *intifada* and the global recession (particularly the crisis in the high-tech industry)—also had an adverse effect on the balance of payments. The rise in the current-account deficit reflects a steep increase in the deficit on the services account due to plummeting exports of tourism services and start-ups, and a slight increase in the deficit on the goods account, reflecting falling exports and imports. There was, however, an improvement in the factor input account due to the fall in dividends paid to nonresidents and a significant drop in total wage payments to Palestinian workers.

The factor input account improved due to a decline in dividend payments to nonresidents and a significant drop in total wage payments to Palestinian workers.

Goods exports fell by 8 percent in volume terms in 2001, after rising by an annual average of 8 percent for nine consecutive years. The decline in exports was led by the advanced industries and derived from the crisis in the high-tech industry and the economic slowdown in the US and in many other countries, reflected in the moderation of world trade. The slowdown in high-tech exports checked structural change, at least

<sup>15</sup> The change in the composition of employment in the business sector contributed a rise of 2.4 percentage points in the real wage in the first half of the year (compared to the equivalent period in 2000); most of the change had already been expressed in the form of increased productivity.

<sup>16</sup> The discussion below disregards the errors and omissions in the balance of payments, which amounted to \$ 2.5 billion in 2001.

**Table 6**  
**Balance of Payments, 1990–2001**

	(\$ billion, annual rates)						
	1990–92	1993–96	1997	1998	1999	2000	2001
Import surplus	6.1	9.9	10.1	7.5	9.4	8.0	8.1
Current-account (-)	-0.7	-4.1	-4.0	-1.4	-3.0	-1.4	-1.7
Implied capital imports <sup>a</sup>	0.3	5.6	13.4	3.3	4.1	2.0	1.6
Capital transfers	0.9	0.8	0.7	0.6	0.6	0.5	0.4
Investment in Israel							
by nonresidents <sup>b</sup>	0.3	3.5	5.7	4.2	5.6	9.4	3.2
Direct investment in Israel							
by nonresidents	0.4	0.9	1.6	1.8	2.9	4.4	3.0
Portfolio investment in							
Israel by nonresidents	-0.1	2.6	4.1	2.5	2.7	5.0	0.1
Rise (-) in foreign-							
exchange reserves <sup>c</sup>	0.4	-1.5	-9.4	-1.9	-1.1	-0.6	0.1
Foreign-exchange reserves <sup>d</sup>	6.2	8.6	20.6	23.1	23.2	23.8	24.1
Net external debt	17.0	19.8	15.2	11.4	10.0	7.4	4.3

<sup>a</sup> Including errors and omissions.

<sup>b</sup> Direct and portfolio investment.

<sup>c</sup> Excluding revaluation gains.

<sup>d</sup> Held by Bank of Israel and central monetary institutions at end of period.

SOURCE: Based on Central Bureau of Statistics data.

temporarily, and these exports amounted to 76 percent of industrial exports, similar to their share in 2000.

Tourist industry exports fell to half their level before the *intifada*. In 2001:IV there was an additional contraction in tourism, apparently due to the terrorist attacks on the US and the ensuing war in Afghanistan. The decline in tourism services contributed about half the total fall in service exports. Exports of start-ups (recorded as exports of services) were hit directly by the global crisis in the high-tech industry, and were virtually nonexistent.

The economic slowdown led to a 5 percent decline in goods imports in 2001 (at constant prices). Imports of services (at current prices) rose by 1.3 percent, while imports of factor input services dropped by 35 percent. More than a third of the decline in imports of factor inputs stemmed from the reduction in dividends paid to nonresidents on profits from transactions involving the sale of start-ups. As the export of start-ups plummeted to almost nothing, payments of dividends on them also fell. Another reason for the decline in factor input imports in 2001 was the 90 percent drop in wage payments to Palestinian workers.

Capital flows were also affected by the *intifada*, which increased the security risk, as well as by the sharp fall in the Nasdaq, making it difficult to go public abroad. Investment in Israel by nonresidents plummeted by almost 70 percent—from \$9 billion in 2000 to about \$3 billion in 2001, while at the same time investment abroad by residents, which is to a great extent the consequence of investment in Israel by nonresidents, contracted substantially (Table 6).

Capital flows were affected by the *intifada*, which increased the security risk, and by the steep drop in the Nasdaq, which hampered offerings abroad.

Portfolio investment (shares and convertible securities), which are inherently sensitive to the situation in global capital markets, fell to almost nothing, compared with investment of \$5 billion in 2000. Direct investment fell by 30 percent and amounted to \$3 billion, slightly above its 1999 level. The decline in foreign-currency sources appears to have contributed to the increased flow of credit-taking and slower growth rate of residents' foreign-currency deposits in domestic banks.<sup>17</sup>

In an economy with an exchange rate that is in effect floating, at least to the extent that the Bank of Israel refrains from intervening in foreign-currency trading, and where the government does not manage its foreign-currency accounts via the market, the current-account deficit of the private sector is by definition equivalent to the private sector's capital inflow (including errors and omissions). This means that beyond covering the current-account deficit, capital flows offset one another. On the basis of developments in the balance of payments in recent years, nonresidents would appear to have been the cause of capital inflow, and this was offset by the capital outflow of residents, in response to the activities of nonresidents and the change in the exchange rate. This assessment was reinforced in 2001, when plummeting investment in Israel by nonresidents (by all definitions exogenous<sup>18</sup>) brought in its wake an equivalent drop in capital outflow by residents. Direct investment abroad by residents fell by over 50 percent in 2001, and amounted to \$1 billion, their investment in foreign securities falling particularly steeply—by 90 percent—and amounting to a paltry \$200 million.

## 6. MONETARY POLICY AND DEVELOPMENTS, PRICES, AND THE CAPITAL MARKET

The Consumer Price Index (CPI) rose by 1.4 percent in 2001—less than the annual inflation target range but within the range defined as price stability (Table 7). The development of prices during the year was not uniform: in the first half of the year the CPI rose by 1.1 percent, while in the second half it remained almost unchanged, as the increase in 2001:III was almost completely offset by the decline in 2001:IV (Figure 2a). The slowing of both actual and expected inflation during the year derived from the deepening economic slowdown and the exchange-rate path; the exchange rate, in turn, was affected by the widening interest-rate differential between the local- and foreign-currency segments that resulted from the accelerated interest-rate cuts announced by the US Federal Reserve. The low level of activity moderated the effect of the exchange rate on prices, however, as was also evinced in the 1.9 percent decline in wholesale prices despite the local-currency depreciation.

Monetary policy continued to focus on attaining the inflation target while maintaining stability, and was expressed in the continued, gradual, and almost constant reduction by the Bank of Israel of its key interest rate (Figure 2b). In the course of 2001 the

The decline in actual and expected inflation in 2001 was influenced by the deepening recession and the exchange-rate path; the latter was affected by the widening interest-rate spread between the local- and foreign-currency segments.

<sup>17</sup> These transactions are recorded only indirectly in the balance of payments, through the banks' activities abroad.

<sup>18</sup> In other words, not connected with residents' foreign-currency transactions.

**Table 7**  
**Indicators of Price Developments, 1990–2001**

	(percent, annual terms)							
	1990–91	1992–95	1996	1997	1998	1999	2000	2001
<i>Year-end</i>								
CPI	17.8	10.8	10.6	7.0	8.6	1.3	0.0	1.4
CPI excl. housing	14.8	9.2	9.8	6.8	8.6	2.0	0.6	0.4
CPI excl. housing, fruit & vegetables, clothing & footwear	15.6	9.5	10.5	7.8	8.5	2.2	0.9	0.4
Wholesale price index	13.6	9.0	7.0	5.9	8.2	3.5	2.0	-1.9
Exchange rate against currency basket <sup>a</sup>	11.4	8.5	3.0	3.7	20.6	-2.5	-6.3	3.7
Exchange rate against dollar	8.9	7.8	5.0	7.9	18.0	0.4	-2.6	4.8
<i>Average</i>								
CPI	18.1	11.3	11.3	9.0	5.4	5.3	1.1	1.1
CPI excl. housing	14.5	9.7	9.9	8.4	5.3	6.0	2.0	0.4
CPI excl. housing, fruit & vegetables, clothing & footwear	15.9	9.9	10.5	8.9	6.0	6.3	2.2	0.3
Wholesale price index	13.8	9.2	8.6	6.3	4.2	7.1	3.6	-0.1
Exchange rate against currency basket	11.4	8.6	3.5	4.3	9.6	8.3	-4.7	1.4
Exchange rate against dollar	9.0	7.3	5.9	8.2	10.2	8.9	-1.5	3.4
Real exchange rate in export terms <sup>b</sup>	-5.4	-2.6	-3.5	-3.1	0.0	1.1	-3.3	-1.2
Real exchange rate in import terms <sup>c</sup>	-6.5	-1.8	-6.0	-6.4	-2.8	0.2	-1.2	-1.5
Terms of trade <sup>d</sup>	1.3	-0.8	2.6	3.5	3.0	0.9	-2.2	0.3

<sup>a</sup> Average of last month of period vis-à-vis average of last month of preceding period.

<sup>b</sup> Ratio of export prices excluding diamonds to deflator of business-sector product including residential services.

<sup>c</sup> Ratio of import prices excluding diamonds to deflator of business-sector product including residential services.

<sup>d</sup> Import-export price ratio excluding diamonds.

SOURCE: Based on Central Bureau of Statistics data.

central bank lowered the interest rate from 8.2 percent to 5.8 percent (in December), against the backdrop of the persistent reduction in inflation expectations derived from the capital market. In September and October, after continuous interest-rate cuts since the beginning of the year, inflation expectations and the Bank of Israel's forecasts rose to the vicinity of the upper limit of the inflation target for 2001, and it looked as if the trend change was expected to persist; as a result the interest-rate cuts were halted temporarily, and were renewed in November, when forecast and expected inflation declined again. The economic slump, expressed in the fall in business-sector product and the widening output gap—the full extent of which transpired only towards the end of the year (Figure 3a)—appears to have moderated the rate of price increases vis-à-vis expectations, so that the rate of price increases was below the inflation target. In

view of the intensity of the external shocks, it is doubtful whether a more expansionary monetary policy could have significantly offset the resultant slowdown in activity. Moreover, the maintenance of stability, expressed in the gradual and measured reduction of interest, yielded stability in the financial and foreign-currency markets (expressed in relatively low exchange-rate fluctuations and adherence of expectations to the sphere of price stability), which is by no means self-evident given the rapid widening of the budget deficit and the external and domestic economic shocks.

The continued interest-rate reduction was accompanied by the rapid expansion of the liquid monetary aggregates, including the narrow money supply, M1 (Figure 3b), but since in a regime of inflation targets the money supply is determined endogenously, the greater demand for liquidity may be temporary, due to the security uncertainty or the reduction of nominal interest to a relatively low level and of real interest to a rate below that consistent with long-term equilibrium. In view of the economic slowdown, the increase in the money supply does not at present imperil price stability, although it may constitute an indication that once the economy returns to full employment the interest rate required to maintain price stability may be higher if there is no significant change in the fiscal stance. It is nonetheless reasonable to assume that when a situation of price stability has prevailed over time the ratio of the money supply to GDP will be higher at equilibrium than in the past.

In the context of the deep recession, towards the end of the year the government decided to revise the growth forecast on which the budget was based, reducing it substantially (in relation to the original proposal) while undertaking to return to a declining deficit path. A package of measures was agreed on, including an exceptional 2 percentage-point interest-rate cut by the Bank of Israel, and several structural measures in the financial markets. These included removing the ceiling on the issuance of Treasury bills, which is expected to increase the Bank of Israel's flexibility in implementing monetary policy and help in developing the extra-bank money market; raising the ceiling on investment abroad permitted to institutional investors, and announcing its abolition at the end of the year—a step that completes the liberalization of the foreign-exchange market (although the tax rates still discriminate between domestic and foreign markets); flattening the lower limit of the exchange-rate band and reducing it by one percent, thereby serving (to a moderate extent) to make the exchange-rate regime more flexible. The assessment was that in these conditions it would be possible to maintain price stability with a lower interest rate. After the exceptional interest-rate cut, however, local-currency depreciation accelerated and inflation expectations rose, though remaining within the limits of the inflation target for 2002 until the end of January. During February, against the background of the intensification of security incidents and the approval of the 2002 budget which, according to assessments, is not consistent with the deficit target, the accelerated depreciation persisted and inflation expectations continued to rise beyond the range defined as price stability.

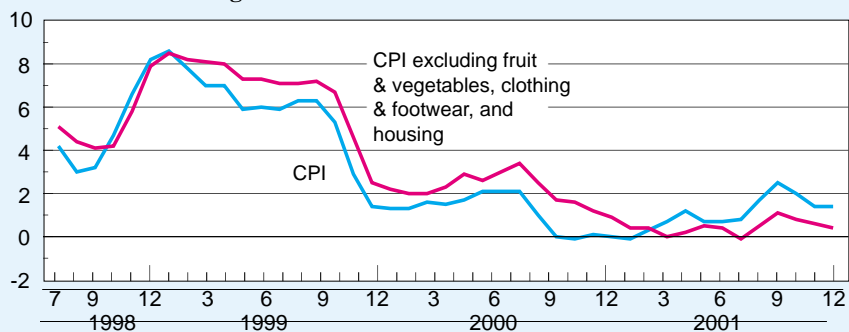
Real short-term interest, which is derived from the differential between the rate announced by the Bank of Israel and inflation expectations, declined from about 7 percent at the beginning of 2001 to around 4 percent in December, and to approximately

In view of the intensity of the external shocks, it is doubtful whether looser monetary policy would have been able to significantly offset the resulting economic slump.

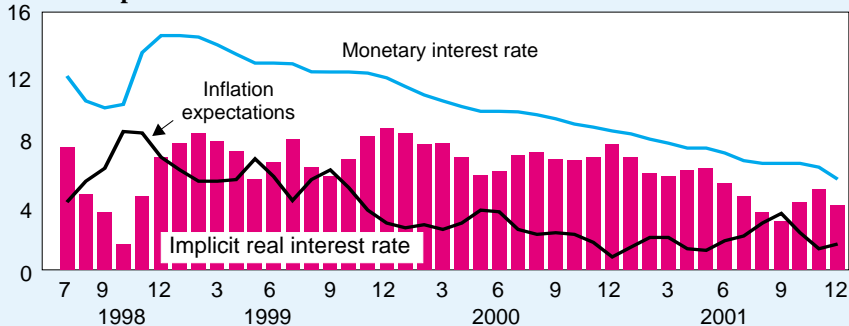
In view of the recession, the rise in the money supply does not at present threaten price stability, though it might indicate that once full employment is restored the interest rate required in order to maintain price stability could be higher.

**Figure 2**

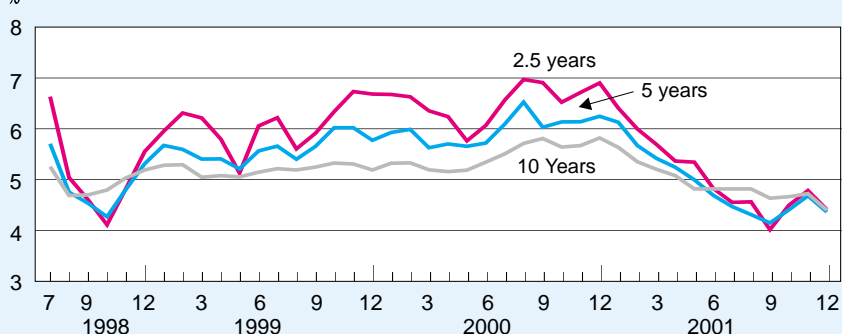
**a. Rates of Change of Selected Price Indices in the Last 12 Months**



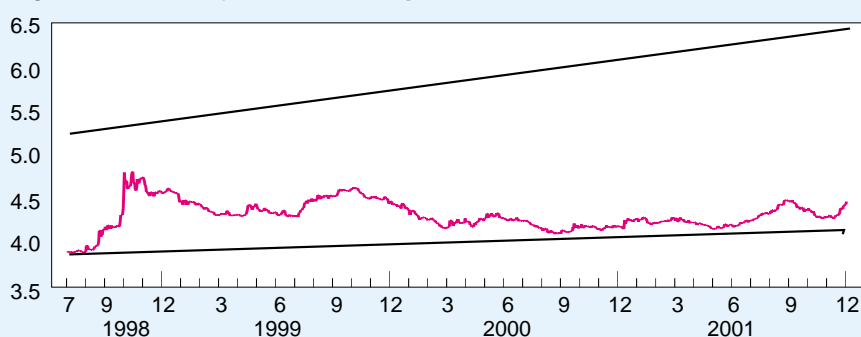
**b. The Bank of Israel Interest Rate, Inflation Expectations, and Implicit Real Interest**



**c. Real Indexed Interest Rates**

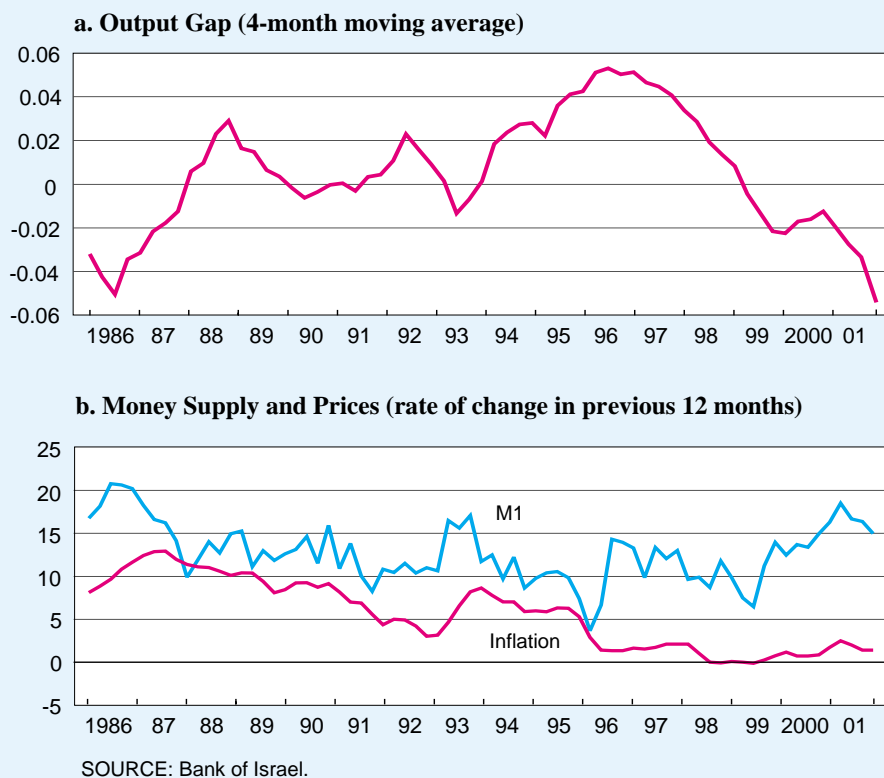


**d. NIS/Currency-Basket Exchange Rate**



SOURCE: Bank of Israel.

Figure 3



0 percent at the beginning of 2002. Real long-term interest and the yield on long-term bonds also declined during the year, in contrast with their trend in recent years, albeit at a slower rate, and in mid-year the declining trend that had characterized them in the first half—up to the steep interest-rate cut at the end of December—was checked. This interest rate, the level of which is measured from the yield on government bonds (for nine years) declined from 5.8 to 4.4 percent during the year (Figure 2c), and after a slight dip in December it climbed again at the beginning of 2002 (after the budget was approved). Long-term interest was influenced by the weaker demand for investment and the reduction of short-term nominal interest in the framework of monetary policy, on the one hand, and increased government borrowing, on the other. Net borrowing to finance the budget deficit was expressed in the issue of negotiable bonds to the amount of NIS 12 billion, compared with the planned issue of only NIS 4 billion. Furthermore, the government also used its deposit at the Bank of Israel, amounting to NIS 5 billion, to finance the deficit. As a result of these developments, even after the steep interest-rate cut by the Bank of Israel at the end of December, the fall in interest on government bonds was relatively small. The development path of real long-term interest was also reflected by the decline in mortgage interest, which was checked in the middle of the year and fell once more after the December interest-rate cut.

Real short-term interest declined from 7 percent in early 2001 to 4 percent in December, and to around zero percent in early 2002.

The deepening recession, expressed in the accelerated decline of business-sector product, was reflected in the falling inflation rate despite the 5 percent local-currency depreciation during the year.<sup>19</sup> In view of the slump, expressed *inter alia* in the financing difficulties experienced by many firms, the reduction of real interest during the year was very important. The intensity of the slowdown impaired the ability of expansionary monetary policy to stimulate economic activity, however, because of the rise in credit risk due to the reduced ability to repay loans. The increase in this risk, which moderated the efficiency of the real interest rate as a channel for stimulating real economic activity, served to underline the significance of the exchange rate as a channel for stimulating economic activity by contributing to real depreciation.

After the steep interest-rate cut at the end of December, there was sharp local-currency depreciation, and the objective of policy was to maintain the depreciation without undermining stability, which would oblige the Bank of Israel to raise the interest rate again. Whether this succeeds depends on both monetary and fiscal policy. Loose monetary policy together with adherence to fiscal restraint could serve to sustain real depreciation, especially if the path of wages does not erode depreciation.

In 2001 the capital and money markets were affected by both the domestic and the global economic slump, the crisis in the capital markets—and in the US in particular—and the interest-rate cuts in Israel and elsewhere. For most of the year—until 2001:IV—demand for finance did not decline, and there was no fall in the supply of finance from financial intermediaries either. Consequently, the extent of finance raised from financial intermediaries—the banks, the stock market, venture capital funds, and from abroad—remained similar to that in 2000. The share of capital raised in stock markets fell in view of the crisis in the capital markets, which in effect increased the price of this kind of financing, and the share of banking finance rose, as its cost declined (as did the cost of the tradable debt), due to the fall in (short- and long-term) interest this year. These changes in the composition of the financing of economic activity in 2001 led to the reversal of some of the trends evident in the last few years—primarily the downward trend in the share of banking finance that had prevailed until 2000 and the rise in finance from foreign investors. Thus, offerings on US stock markets fell to a third of their level in 2000, offerings on European stock markets ceased altogether, and capital raised via venture capital funds plummeted (although it was twice as great as in 1999). Note that offsetting the decline in the supply of sources from extra-bank financial intermediaries by the banking system for most of the year softened the impact of the crisis in the capital markets on economic activity. This development transferred the risk to the banking system, however, and was expressed in the deterioration of the quality of bank credit. In 2001:IV finance available to the private sector—especially from the domestic banking system—declined (alongside a fall in direct credit from abroad). This development appears to reflect a reduction in the supply of bank sources

<sup>19</sup> December 2001 average exchange rate vis-à-vis December 2000 average exchange rate.

Monetary expansion together with tight fiscal policy could enable real depreciation to persist, especially if the development of wages does not erode depreciation.

According to the Bank of Israel's Companies Survey for 2001:IV, the credit constraint does not at present constitute the principal barrier to the expansion of economic activity in any industry.

(rather than in the demand for credit), and this could hold firms back in the future. Nevertheless, as the Bank of Israel's Companies Survey for 2001:IV shows, at this stage the credit constraint was not the main obstacle to the expansion of activity in any principal industry, as the demand constraint was far more important.

**Table 8**  
**Monetary Indicators, 1990–2001**

(percent, annual rates)

	1990–									
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
M1 <sup>a</sup>	25.8	23.7	18.8	3.9	15.9	13.2	12.0	9.6	11.0	14.1
Nondirected credit <sup>a</sup>	33.7	44.9	28.0	21.3	24.6	19.1	16.1	16.7	13.1	10.9
Nominal Bank of Israel interest rate	14.9	11.9	13.7	15.8	16.4	14.7	12.5	12.8	9.7	7.0
Expected inflation	14.6	9.0	12.9	10.0	11.2	9.1	6.1	5.1	2.6	1.9
Nominal interest on SROs (CDs)	12.1	9.7	11.6	13.3	13.8	12.2	10.3	10.7	8.0	5.6
Nominal interest on non-directed credit in NIS <sup>b</sup>	24.4	16.3	17.4	20.2	20.7	18.7	16.2	16.3	12.8	10.0
Average currency-basket interest rate <sup>c</sup>	7.5	4.5	4.6	5.3	4.6	4.9	4.9	4.5	5.5	3.6
Real yield on 5-year bonds	1.9	3.0	3.1	4.3	4.6	4.1	5.1	5.6	6.0	4.9
Real Bank of Israel interest rate <sup>d</sup>	0.3	2.5	1.8	5.3	4.7	5.2	6.2	7.5	7.1	5.1
General Share-Price Index <sup>e</sup>	53.0	42.3	-38.5	14.8	-1.6	36.1	2.9	65.7	0.5	-6.9

<sup>a</sup> Rise in annual average. M1 = cash in the hands of the public *plus* demand deposits. From 1996 this includes mortgage banks.

<sup>b</sup> 12-month inflation expectations estimated from the capital market, assuming full tax exemption.

<sup>c</sup> Based on 3-month Libor rate.

<sup>d</sup> Until 1997 daily average of effective marginal interest on monetary loan at quota; from 1998 average of effective interest at daily auction of banks' deposits in Bank of Israel *less* inflation expectations for 12 months, as derived from capital market.

<sup>e</sup> Index of all shares and convertible securities, rate of change during the year.

SOURCE: Based on Central Bureau of Statistics data.

The growth rate of the public's financial asset portfolio was lower in 2001 than the annual average in the previous decade, because of macroeconomic developments. The long-term trends evident in the composition of the portfolio in recent years—a decline in the share of long-term assets and continued rise in that of unindexed short-term assets—persisted in 2001, despite the reduction of the short-term interest rate. Because since 2001:III the reduction of the real short-term interest rate has accelerated, however, falling below the long-term rate, a trend reversal can be expected in the growth of the share of short-term assets in the public's portfolio.

The implementation of the reforms of the capital and financial markets and the liberalization of the foreign-exchange market that have been under way for the last fifteen years continued in 2001, and in that framework it was decided to persist with the removal of restrictions on the activities of some institutional investors. At the end

of 2000 new regulations regarding investment by insurance companies went into effect, and during 2001 the Treasury submitted a proposal for introducing similar changes in the restrictions on the activities of provident funds planned for mid-2002. These two changes in effect completely remove most of the limitations on investment by these entities, replacing them with prudential standards. Although the abolition of restrictions is an important step towards financial deregulation, the proposal regarding provident funds does not come to grips with other problems associated with the activity of institutional investors, first and foremost the banks' overwhelming control in managing the funds, which creates concentration in the money and capital markets and raises concerns about conflicts of interest.

The new regulations regarding investment by the insurance firms which went into effect in October 2000 enable these firms to invest abroad up to 5 percent of the assets of profit-sharing life insurance schemes, and as a result 1.1 percent of insurance firms' assets (\$350 million, 50 percent of it in securities of Israeli companies traded abroad) was invested abroad in 2001. The resulting profits of the insurance firms (capital gains, dividends, and interest) are tax-exempt. This is not the case with regard to profits abroad of provident and mutual funds; these, in contrast with their profits in Israel, are liable for taxation at 35 percent of the real profit, and this is the main reason for the low level of these funds' investments abroad.

The gradual opening up of Israel's economy and the removal of all the restrictions on the entry and exit of capital—a process which began in the late 1980s—was concluded at the end of 2001 with a package of measures, announced in December. These determined that henceforth the ceiling on investment abroad by institutional investors would be raised to 20 percent of their total assets, to be removed completely at the end of 2002. The process of opening up the economy was accompanied by the removal of all the restrictions on foreign investment in domestic assets. Once the process of liberalizing the capital account is completed, the distortions in the tax laws remained to be corrected by bringing the taxes on gains from domestic and foreign assets, in Israel and abroad, into line with one another.

One of the results of the reform in the money and capital markets was the disappearance of non-negotiable earmarked government bonds from the portfolio of the provident funds in 2001. The background to this was the decision, made in 1986, to cease issuing new earmarked bonds for provident funds, and this has led in the last few years, including 2001, to a rise in the share of convertible assets, as the funds diverted new deposits and receipts from the redemption of old earmarked bonds to purchasing other assets. At present the government is committed to issuing bonds only for the old pension funds, and to a smaller extent (70 percent) to new pension funds (opened in 1995), as well as to yield-ensuring life insurance plans (which were closed to new members in 1991, when it was decided that profit-sharing insurance plans would be opened).

One of the results of the reform of the money and capital markets was the disappearance during 2001 of non-negotiable earmarked government bonds from the portfolio of the provident funds.

## 7. POLICY AND OBJECTIVES FOR THE NEXT FEW YEARS

The main policy target for next year and those to come is to restore the economy to a path of sustainable growth enabling employment to grow and unemployment to fall while maintaining economic stability, including the continued bolstering of price stability and the improvement of the balance of payments. All this must be achieved while contending with the problem of poverty, which has been exacerbated in the last few years, *inter alia* because of low labor force participation rates.

The deepening recession at a time of domestic and external shocks, together with the rise in the unemployment rate, confronts policy-makers with the challenge of creating the conditions which will stimulate economic activity and prevent the aggravation of the slump, on the one hand, and prepare the economy to return to a path of sustainable growth once the storm has passed and world markets recover, on the other. A macroeconomic policy mix that is consistent with these objectives involves some loosening of monetary policy while maintaining price stability, alongside tight fiscal policy. This mix, which will enable price stability to be maintained with a relatively low interest rate, could serve to generate real local-currency depreciation, which would stimulate the activity of industries producing tradables, particularly for export. It is necessary to cope with the protracted fall in total productivity in order to attain Israel's growth potential, and this requires accelerating the implementation of structural reforms intended to increase efficiency and competitiveness, reduce the size of the budget, thereby easing the tax burden and enabling far-reaching changes in its composition.

To enable Israel to become more fully integrated into the global economy, as the process of liberalizing capital flows is completed, policy-makers must also focus on economic stability, because exposure to capital inflow and outflow accords advantages but also makes the economy more vulnerable, exposing it to shocks and crises in the global economy and to the sharp response of the markets to policy not perceived as credible. Despite the indications, which have increased recently, that fiscal restraint is being relaxed, the players in the capital and money markets, including the international rating agencies, are still expressing confidence in Israel, as reflected in the relative stability of the financial and foreign-currency markets, and the absence of change in Israel's credit rating. The persistence of this stability is not assured, however; it depends on returning to a path of fiscal discipline and declining deficits and debt as well as on maintaining price stability. Commitment to a responsible long-term macroeconomic policy is more important than ever at present, when uncertainty in the global economy and the geo-political environment is greater than it has been for a long time.

### a. Fiscal policy

Responsible long-term fiscal policy requires close adherence to the deficit target determined by the government for 2002, 3 percent of GDP,<sup>20</sup> and continued compliance

<sup>20</sup> After adjusting for the belated receipt of American civilian aid, the deficit target for 2002 should be 2.5 percent of GDP.

The main policy objective for 2002 and subsequently is to restore the economy to a sustainable growth path that will make it possible to increase employment and reduce unemployment, while maintaining economic stability.

The macroeconomic policy mix that is consistent with the policy objectives is some monetary expansion while maintaining price stability and tightening fiscal discipline.

Maintaining economic stability depends on returning to a path of fiscal restraint, reducing the deficits and the debt, and adhering to price stability.

The initial analysis of the 2002 budget indicates that the deficit is expected to deviate from its target, unless corrective steps are taken during the year.

Attaining the deficit target set for 2003 will mean making a concerted fiscal effort, even if the economy returns to a relatively high growth rate, primarily because some of the adjustments made in the 2002 budget are temporary.

with the declining path to reach 1 percent in 2005. On the basis of current assessments of the growth rate in 2002, it is reasonable to assume that the target for the year will necessitate sweeping expenditure cuts beyond the extent in the budget approved by the Knesset. It is particularly important that the adjustment of the budget be implemented on the (current) expenditure side and not by increasing the tax burden, as the latter would signal that the departure from the declining deficit path was not temporary, thereby hampering the economy's return to a growth path. An initial analysis of the 2002 budget (based on an updated forecast of economic growth in 2002) indicates a planned real 4 percent increase in expenditure and an expected deviation of 1–2 percent of GDP from the deficit target if corrective steps are not taken during the year. The risk of a deviation is great partly because most of the budget reserves have already been allocated. Early identification of the deviation from the target set will be possible by deploying the monitoring mechanism decided upon by the government but not yet implemented. Moreover, attaining the deficit target set for 2003 will require a concerted fiscal effort even if the economy returns to a relatively high growth rate, mainly because some of the adjustments made in the 2002 budget are temporary. In the longer term continued progress towards the fiscal norms accepted in advanced economies depends on significantly curtailing the rise in public sector expenditure, expressed in a decline in the share of public expenditure in GDP, which is a precondition for easing the tax burden.

When it comes to the composition of government expenditure, the trends that do not support a return to sustainable growth persisted and were even exacerbated in 2001. The share of current expenditure, especially transfer payments, in total expenditure rose. This development is expected to continue in the 2002 budget, 93 percent of the increase in which is in current expenditure, and only 7 percent in investment. The 2002 budget also includes tax hikes. In order to support the return to a growth path the composition of expenditure must be changed, and the share of infrastructure investment enlarged. Such investment will contribute to growth by serving to increase business-sector productivity. Investment in the transport infrastructure—where the accumulated backlog is assessed at 10 percent of GDP—especially in mass transportation, will both bring the periphery closer to the center and reduce unemployment, which is particularly high at the periphery, by reducing the dependence of outlying towns on nearby factories. It will also alleviate road congestion in the Tel Aviv metropolitan area. Non-budgetary investment in the transport infrastructure grew significantly in 2001 with the acceleration of work on the Cross Israel Highway that is being built at the initiative of the government but with private finance (in conjunction with government insurance), and is expected to be high in 2002, too. The Treasury intends to increase non-budgetary infrastructure investment, using the BOT and PFI systems,<sup>21</sup> which could lead to a rise in infrastructure investment due to the greater efficiency of the private sector in implementing projects. However, the long-term budgetary impli-

<sup>21</sup> Under the BOT (Build, Operate, Transfer) system, the business-sector developer initially builds and develops the resource, and later transfers it to the government; the PFI system involves privately financed investment, with services that are then purchased by the government.

cations of this (including government guarantees) must also be taken into account and given clear and transparent expression in the budget.

The real—13 percent—rise in transfer payments in 2001, further to the annual average 7 percent increase in the preceding five years, reflects the rise in the real wage to which most benefits are linked, the rapid and continued expansion of the population of recipients of benefits, the marked increase in child allowances from the fifth child in accordance with the ‘Halpert Law’ which went into effect in 2001, and the rise in disabled persons’ benefits. Those benefits, which replace labor income, alongside various other benefits (reductions in rates, rent subsidies, and reductions in payments for various services), make the alternative of not working and living on benefits more attractive, raise the reservation wage, and encourage exit from the labor force. This serves to constantly increase the budgetary burden of these benefits, which will eventually necessitate raising tax rates, thereby further diminishing the incentive to work. The required reform of transfer payments must therefore aim at reducing the negative incentive to work embodied in them and at putting a stop to the growing budgetary burden they involve.

The increase in the real wage in the general government sector is affected by wage drift mechanisms, including promotion rates and wage hikes due to seniority, which were intended to prevent erosion of the real wage at a time of rapid inflation, and are not appropriate for an environment of price stability. These are among the main factors responsible for the difficulty in curbing current budgetary expenditure. Adjusting the structure of general government wages to a situation of price stability is required both to strengthen the link between labor productivity and wages and to provide greater budgetary control.

The rise in the tax burden in 2000, and the fact that it remained at a level of 41 percent of GDP in 2001, combined with the government’s decision in the 2002 budget to impose an additional tax on high incomes, constitutes a retreat from the desired path of easing the tax burden, which is needed in order to stimulate the return to GDP growth. Without significantly easing the tax burden it will be very hard for the economy to attain its growth potential, and the incentive to transfer business activities to countries with a more accommodating tax structure, in particular, and business environment, in general, will persist.

Implementing the reform of the tax system with regard to the composition of taxes is of crucial importance; this will widen the tax base by annulling the tax exemption on income from capital-market gains, reduce the tax on labor, especially for medium-income groups, and reduce the distortions arising from discrimination in tax rates on different investors and investment channels. All this must occur while maintaining the progressive nature of the tax system, in view of the social aim of reducing income inequality. (A first step towards reforming the tax system could be to unify tax rates on interest income from all sources, keeping it revenue neutral.)

A large part of the government’s expenditure, on both social services and benefits, is affected directly by demographic trends. According to these trends, which relate solely to shifts in the age-structure of the population (and not to expected changes in the relative share of groups which tend to rely on transfer payments), and on the basis

The real rise in transfer payments in 2001 largely reflects the increase in the real wage, to which most benefits are linked, and the rapid and continuous growth of the population of recipients of benefits.

Unless there is a significant easing of the tax burden, it will be difficult for the economy to attain its growth potential, and the incentive to transfer economic activity to countries with lower tax rates and a more accommodating economic environment will persist.

In long-term budget planning, attention should be paid to demographic processes with respect to their effect on the structure and extent of benefits.

of the rules currently in place as regards the allocation of benefits and expenditure on health and education services (including the trend towards the higher relative price of these services), the demographic change expected in the next 20 years will increase the share of public expenditure on social services and transfer payments by over 4 percentage points. Moreover, the demographic shifts are themselves influenced by the structure of benefits: the composition of the child allowances according to which the benefit increases from the fourth child, and especially after the fifth, contributes to increasing the share of large families in the population, and even more so that of such families with no or only one wage-earner, which rely to a growing extent on child benefits and other transfer payments. This trend increases poverty rates within the population, as well as the tax burden of the transfer payments. Long-term budgetary planning must therefore take the demographic processes and their extent, as well as their effect on the structure of benefits, into account.

#### **b. Monetary policy developments and the reform of the money and capital markets**

Monetary policy will continue to strive to foster price stability, while maintaining financial stability. The removal of the ceiling on the issuance of Treasury bills will give the Bank of Israel greater flexibility in deploying the instruments at its disposal in order to implement monetary policy, and will contribute to creating the infrastructure for an extra-bank money market which will also serve to make monetary policy more efficient. In the longer run, as real economic activity revives and GDP growth picks up and approaches its potential, monetary policy will face the challenge of maintaining price stability while converging towards interest rates similar to those in the advanced economies. The ability to meet the challenge depends not only on monetary policy but also on restoring fiscal discipline.

According to the experience of countries in which monetary policy is administered within a framework of inflation targets, as well as Israel's experience over the last few years, the lags with which monetary policy has an effect hamper the attainment of calendar-year targets, and on occasion it can require a sharp interest-rate response to shocks that occur towards the end of the year. A response of this kind is not consistent with the maintenance of stability, however. The attempt to meet calendar-year targets sometimes also requires steep interest-rate responses to one-off price shifts which do not constitute an ongoing change in the inflation rate. Consequently, with the transition to a fixed target of maintaining price stability, it is advisable to interpret the target in an ongoing and flexible way, allowing for temporary short-run deviations from the range defined as price stability. This interpretation of the price-stability target will obviate the need to make sharp interest-rate shifts in response to transient developments solely to meet a calendar-year target.

Flattening and lowering the lower limit of the exchange-rate band contributes slightly to making the exchange-rate regime more flexible by reducing the probability that the rate will reach the lower level of the band and oblige the Bank of Israel to intervene in the foreign-exchange market. It would be advisable to abolish the band in the future in

order to avoid a potential clash between the obligation to defend its borders and the need to maintain price stability.

Raising the ceiling on investment abroad by institutional investors, and abolishing it at the end of the year, as was decided in December in the framework of the package of measures, represent the last stage of the liberalization of capital flows. In order to complete the process and make it more effective it is necessary to amend tax legislation, bringing tax rates on similar channels for similar terms and in Israel and abroad into line with one another

The almost complete control of the banks over the provident and mutual funds creates concentration in the money and capital markets and gives rise to concern regarding conflicts of interest; it is therefore desirable to act to reduce it. The change will contribute to developing an extra-bank system of financial intermediation, which is currently extremely limited. Encouraging the development of a market for short-term commercial paper can also contribute to this. In addition, rescinding the restrictions on the investment structure of institutional entities, some of which have already been implemented, will serve to deepen the extra-bank money market.

The reform of the pension system is required both in order to enhance welfare and to foster the capital market. Since only 60 percent of wage-earners have pension insurance, and the rate is far lower among those earning low wages,<sup>22</sup> legislation regarding a state pension should be introduced, expanding pension coverage for wage-earners and the self-employed up to a given level of income, channeling pension funds to the capital market, and ensuring actuarial balance for the old-established funds. It is also necessary to introduce a plan to amend the actuarial deficit of the old-established funds. Funds based on earmarked bonds should be closed to new members, so that their pension savings are channeled primarily to the domestic capital market. At present the business sector cannot compete with the government's earmarked bonds, which are allocated to the pension funds and bear a high interest rate. Note in this context the transfer from unfunded to funded pensions for new general-government sector employees, in accordance with the Economic Arrangements Law recently passed by the Knesset. It is important to ensure those employees join funds which are actuarially balanced and invest the pension funds in the capital market. A reform of this kind will make pension savings the main long-term savings path in Israel, developing the capital market and expanding pension coverage to the entire working population.

### c. Policy intended to expand employment, and other structural reforms

The steep rise in unemployment in 2001 due to the economic slowdown—after rising continuously—and the steady decline in labor force participation rates, mainly among persons with few years of education and in the peripheral areas, means that a concerted effort must be made to deal with labor-market problems. The low participation rates

<sup>22</sup> See E. Terkel and A. Spivak (2001), "Pension Coverage in Israel," *Economic Quarterly* 3, (Hebrew). According to the data presented there, the pension coverage rate for the lowest decile is about one third, rising gradually to 82 percent for the highest decile.

The banks' overwhelming predominance in administering provident and mutual funds creates concentration in the money and capital markets and raises concerns regarding conflicts of interest; it is therefore advisable to act to reduce it.

Currently only some 60 percent of wage-earners have pension insurance, and the rate is far lower among low-wage-earners.

Steps should be taken to ensure that new employees join pension funds that are actuarially balanced and invest in the capital market.

Low labor force participation rates are among the main reasons for Israel's relatively high poverty rates and the failure to attain the growth potential.

Improving the public education system is the key to increasing employment and equality of opportunities in the labor market.

Government policy should focus on both the more rigorous implementation of employment tests and on changing the allied structure of transfers and benefits, so that going to work will involve a smaller loss.

The updating mechanism of the minimum wage should be altered, so that it is less affected by wage hikes of other workers when the labor productivity of low-wage-earners is low.

are among the principal reasons for Israel's relatively high poverty rate and the failure to attain the country's growth potential. The effort to increase the participation rate must include steps to improve the skills of persons with few years of education and adapt them to the changing labor market, such as reducing the negative incentive for labor-force participation embodied in transfer payments, easing wage rigidity in the business sector, and cutting the number of foreign workers.

Improving individuals' human capital in the short run by an efficient system of vocational training, and in the longer run by enhancing the education system, could contribute to raising labor productivity and individuals' earning potential, and hence to increasing the relative worthwhileness of going to work and the chances of finding work. Enhancing the public education system is the key to equal opportunity in the labor market; consequently, in determining education policy, the government should also take into account the effect this has on employment potential and unemployment, giving priority to improving the level of education among the weaker segments of society by differential budget allocation.

The transfer payments policy currently prevailing embodies a negative incentive for participation and employment, serving to reduce the relative worthwhileness of labor and raise the reservation wage. Part of the problem stems from the fact that most of the transfers are contingent on not working or on a very low income, so that the reward for work at low wage levels is very small. In order to contend with this issue, government policy should focus on tighter imposition of employment tests, on the one hand, and on changing the allied structure of transfers and benefits, so that going to work will involve a smaller loss of benefits, on the other. Note, however, that the system of transfer payments plays an important role in reducing income inequality, and that some of them (e.g., unemployment benefit) are less generous than is the rule in advanced economies.

Making employment and wages more flexible could cause the labor market to adapt to the level of activity more rapidly and efficiently, helping to reduce the natural unemployment rate in the medium and long run. Although Israel's labor market is more flexible than those of many European countries,<sup>23</sup> most of its increased flexibility derives from greater employment flexibility (e.g., due to the expansion of employment via employment sub-contractors and individual contracts), while the mechanism for determining wages is still relatively rigid, and is expressed in the marked lag in the response of wages to changes in the demand for labor. In order to increase wage flexibility and tighten the relation between it and labor productivity, the linkage between wages in different sectors and industries should be altered. The system of linking the minimum wage should also be changed, so that it is less influenced by wage-hikes of specific groups when the labor productivity of the low-wage group does not increase. Note that with regard to unemployment pay, the rate of unemployed persons receiving unemployment benefit has risen over time, and that despite its relatively low replace-

<sup>23</sup> Yael Artstein, (2001) "Labor Force Flexibility," in *From Government Intervention to a Market Economy: Israel's Economy, 1985-98, Articles in Memory of Michael Bruno*, edited by A. Ben-Bassat (Hebrew).

ment ratio, it has contributed significantly to the deviation of wages from equilibrium and the increase in the natural unemployment rate.<sup>24</sup> Policy should, therefore, focus on rigorously implementing an employment test rather than on making criteria more stringent or reducing the level of unemployment benefit.

In order to increase employment of Israelis the policy of limiting permits for foreign workers should be implemented, and the labor laws should be applied to them too, thereby making it less worthwhile to employ them. Imposing a levy or tax on employers of foreign workers could also help in this respect. There is also room to consider granting permits to individual workers rather than to employers. This would reduce foreign workers' dependence on employers, prevent their exploitation, and help to make it less worthwhile to employ them. Enforcement of the law concerning illegal workers and their employers should also be intensified. The policy measures and reforms proposed for the labor market will serve to increase the labor force participation rate, i.e., to enlarge the number of persons supporting a household, and hence to reduce poverty rates.

Another area in which policy measures could help to bring the economy to a growth path is that of structural reforms, including the privatization process which serves to enhance competition. Progress in this area was minimal in 2001, and decisions were even made in the opposite direction—the decision by a private developer not to proceed with the Jubilee Port and the decision not to split the Haifa and Ashkelon oil refineries into separate and competing units, in contrast to the recommendations of a professional committee. Reforms in this area, especially as regards the infrastructure (transport, the land phone system, fuel, gas, and electricity), will serve to increase competition, lower costs, and accelerate economic activity.

Reforms of the infrastructure (transport, land phones, fuel, gas, and electricity) will serve to increase competition, lower costs, and accelerate economic activity.

<sup>24</sup> Y. Lavi and N. Sussman, (2001) *The Determination of the Real Wage in the Long Run and its Changes in the Short Run: Evidence from Israel, 1968–98*, Bank of Israel Research Department Discussion Paper 2001.4.